

REMARKS

Claims 16-19 and 27-35 are pending in the application. Claims 16-17 and 27 have been amended, and claims 1-15 and 20-26 have been previously cancelled. Claims 33-35 are newly added to the application in order that the applicants can more fully claim the subject matter of their invention. No new matter has been entered by the amendment.

Rejection Under 35 U.S.C. §103(a)

Claims 16-19 and 27-32 have been rejected over Lemelson in view of Harris or Olsson et al. This rejection is overcome in view of the amendment of claim 27 together with the following remarks.

Claim 27 recites a wet treatment nozzle that includes an ultrasonic cleaner that guides a treatment liquid along a flow path to wet treat and object. The wet treatment nozzle further includes an introduction passage and an exhaust passage for introduction and removal of a treatment liquid. The treatment liquid is guided along the flow path such that the treatment liquid is exposed to atmosphere between the housing and the object to be treated. A pressure controller maintains a pressure of the treatment liquids so that the treatment liquid does not flow outside of the flow path. The wet treatment nozzle further includes a weight that minimizes propagation of energy from the ultrasonic transducer to a wall of the housing. The applicants' assert that the wet treatment nozzle recited by claim 27 is not suggested or disclosed by the cited references, taken alone or in combination.

As described by the applicants in their previous response of June 12, 2007, Lemelson fails to suggest or disclose a pressure controller as recited by claim 27. The applicants' previous remarks pertaining to Lemelson are incorporated by reference herein. The instant office action asserts that "Lemelson disclose the use of a 'computer', to also control the position." (Office Action, pg.4). The applicants disagree with the characterization that Lemelson's description of a computer controlling the

position of the tool relative to the work teaches the control of fluid pressure such that the fluid volume is confined to a treatment area despite exposure of the treatment fluid to atmospheric pressure. Nothing in Lemelson teaches, suggests, or discloses a treatment nozzle configured to guide a treatment liquid that is exposed to atmosphere and a pressure controller that maintains a pressure difference so that the treatment liquid and contact with the object does not flow outside of the flow path. Rather than a wet treatment nozzle configured to provide a flow path such that the treatment liquid is exposed to atmosphere, Lemelson discloses a device that is designed to abut against the workpiece or to sealingly engage the workpiece. (See Col. 3, ll. 11-14; Col. 3, ll. 74-75 and Col. 4, ll. 1-5). In the Lemelson device, the treatment liquid cannot be exposed to atmosphere. Accordingly, the applicants assert that claim 27 structurally and functionally differs from the apparatus disclosed by Lemelson.

The addition of Olsson et al. or Harris does not overcome the deficiencies of Lemelson. Neither Olsson et al. nor Harris suggest or disclose a wet treatment nozzle in which a treatment liquid is guided by an ultrasonic cleaner along a flow path, such that the treatment liquid is exposed to atmosphere between the housing of the ultrasonic cleaner and the object to be treated, where a pressure controller prevents the treatment liquid from flowing outside of the flow path. None of the cited references suggest or disclose a wet treatment nozzle that includes an introduction passage on an exterior side of an ultrasonic cleaner and an exhaust passage on another exterior side of the ultrasonic cleaner and a flow path along a housing between the introduction and exhaust passages, such that the treatment liquid is exposed to atmosphere between the housing and the object to be treated.

Claims 16 and 17 have been amended to correspond to the amendment of claim 27 from which they depend.

Claims 16-19 are allowable in view of the amendment and remarks pertaining to claim 27 from which they depend.

Claim 30 has been amended to correspond to the amendment of claim 27 from which it depends.

Claims 28-32 are allowable in view of the amendment and remarks pertaining to claim 27 from which they depend.

New Claims

Claims 33-36 are newly added in order that the applicants more fully claim the subject matter of their invention.

Claim 33 recites, a wet treatment nozzle that includes an ultrasonic cleaner, an introduction passage associated with a first frame member, and an exhaust passage associated with a second frame member. The wet treatment nozzle further includes a weight on the housing of the ultrasonic cleaner. The weight separates the first and second frame members from the housing and is configured to minimize propagation of energy from the ultrasonic transducer to the housing and to the frame members. The applicants assert that the prior art does not suggest or disclose the wet treatment nozzle recited by claim 33.

Claim 34 depends from claim 33 and further specifies that the first and second frame members cooperate to define a flow path. The flow path is configured such that only the treatment liquid contact the object to be treated between the first and second frame member.

Claim 35 depends from claim 34 and specifies that the treatment nozzle include a pressure controller. The pressure controller maintains a pressure difference of the treatment liquid in contact with the object and an atmospheric pressure, so that the treatment liquid does not flow outside of the flow path.

Claim 36 depends from claim 33 and further defines the weight to comprise a ring-shaped weight disposed around the housing.

The applicants have carefully reviewed the additionally cited reference to Elbert et al. and found it not to be relevant to the applicants' pending claims.

The applicants have made a novel and non-obvious contribution to the art of what treatment nozzle design. Depending claims distinguish over the cited references

and are in condition for allowance. Accordingly, such allowances now earnestly requested.

Respectfully submitted,

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